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| 10/579,074 | 05/21/2007 | Christian Funke | 2400.0380000/VLC/CMB | 3350 |

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STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

| EXAMINER | |
|---|---|
| PIHONAK, SARAH | |

| ART UNIT | PAPER NUMBER |
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| 1627 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/579,074 | FUNKE ET AL. | |
| | Examiner | Art Unit | |
| | SARAH PIHONAK | 1627 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *17 June 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1 and 6-20* is/are pending in the application.

4a) Of the above claim(s) *6,7,11 and 16-19* is/are withdrawn from consideration.

5)☒ Claim(s) *20* is/are allowed.

6)☒ Claim(s) *1,8-10 and 12-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/13/2010,6/17/2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

This application, filed on 5/21/2007, is a national stage entry of PCT/EP04/12328, filed on 10/30/2004.

### Priority

This application claims foreign priority to the following applications: 10353278.1, filed on 11/14/2003; and 102004006075.4, filed on 2/7/2004. Certified English language translations have been received for the foreign priority documents, and acknowledgement is made of the claim to the foreign priority date of 11/14/2003.

### Response to Remarks

**1.** In the response filed on 5/13/2010, the Applicants have added new claims 8-20, and amended claim 1. Claims 8-10, 12-15 and 20 were included for examination in this office action, as these claims are drawn to the previously elected invention of a composition, and read on the elected species of 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl}-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide and clothianidin. Claims 6-7, 11, and 16-19 are withdrawn from consideration, as they are directed to non-elected inventions and species.

2. Applicant's arguments filed 5/13/2010 have been considered but they are not fully persuasive. The Applicants have argued that the claims as currently presented would not have been prima facie obvious to one of ordinary skill in the art, at the time of the invention, over Lahm et. al., in view of Angst et. al., because Lahm et. al. does not teach the claimed weight ratio of the elected compound of formula (I), clothianidin, to

the elected compound of formula (II), 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl}-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, from 250:1 to 1:50. The Applicants have also asserted that Lahm et. al. discloses that compounds of formula I can be combined with numerous insecticides, fungicides, acaricides, and bactericides, and that there is no particular teaching to select the claimed combinations. The examiner respectfully disagrees. Lahm et. al. teaches a composition comprised of the elected compound, 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl}-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, for controlling pests. Lahm et. al. also teaches that this compound can be combined with other compounds to increase the pesticide activity, and specifically teaches the elected compound of formula (I), clothianidin. Therefore, one of ordinary skill in the art, at the time of the invention, would have been motivated to combine 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl}-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide with clothianidin for broader pesticidal activity. While Lahm et. al. does not explicitly teach the claimed weight ratio of clothianidin to carboxamide of 250:1 to 1:50, Angst et. al. teaches that clothianidin can be combined with other types of pesticides, within the claimed weight ratio. Therefore, as 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl}-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is also taught to be an effective pesticide, it would have been prima facie obvious to combine clothianidin with this compound within the weight ratio range as claimed. As such, the rejection under 35 USC 103(a) was proper. The Applicants have argued that the pesticide compound combined with clothianidin as taught by Angst et. al. is

structurally different from the claimed carboxamide, and therefore, one of ordinary skill in the art would not have been motivated to combine 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl}-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide with clothianidin, in the claimed weight ratio. This argument is not found persuasive because, as discussed above, the compound taught by Angst et. al. and 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl}-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide both have utility as pesticides; as such, it would have been prima facie obvious to combine clothianidin with another pesticidal agent, such as 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl}-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide.

The Applicants have further argued that the instant claims are unexpected over the prior art, due to the synergistic results obtained from the combination of the claimed compounds of formula (I) and formula (II). While this argument has been carefully considered, it is not found to be fully persuasive. Claim 1, as amended is drawn to the composition comprised of compounds of formula (Ia), (Ie), (Ig), (Ih), (Ii), (Ik), (Il), or (Im), and (II-1), at a ratio from 250:1 to 1:50. However, the specification only shows synergy between compounds (Ia), (Ik), and (Im) and (II-1), at a weight ratio of 625:1 and 1:1. The weight ratio of 625:1 is outside of the range cited in claims 1 and 12. The declaration provided by Dr. Wolfram Andersch on 10/27/2009 also shows synergy between compounds of formula II-1 and (Ia), (Im), and (Ik) at ratios of 10:1 and 1:25; therefore, the data is supportive for synergy between the elected compound of formula (II-1) and (Ia), (Im), and (Ik), at the weight ratios of 1:625, and between 10:1 and 1:25.

There is no data to support synergy between the range from 1:25 and 1:625; as the differences between these weight ratios is greater than ten-fold, it is not apparent whether synergy would exist between the claimed combinations in the range within these weight ratios. Additionally, there is no data in the specification or in the declaration which supports synergy between compounds (Ie), (Ig), or (Ih), (Ii), and (Il) and formula (Il-1); therefore, the claims are not commensurate in scope with the data provided by the specification and the declaration. As the compounds of formulas (Ie), (Ig), (Ih), (Ii) and (Il) are structurally different from compounds (Ia), (Ik), and (Im), the synergistic results are not fully supportive for the claimed combinations. Therefore, the rejection was proper and is maintained, for reasons of record. For Applicant's convenience, this rejection will be reiterated below, with slight modification due to added claims 8-10, and 12-15. Claim 20, which is directed to the combination of 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl}-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide and clothianidin within a weight ratio from 10:1 to 1:25, is free of the prior art, as the Applicants have demonstrated from the declaration and specification that synergy is apparent for this particular combination, at this weight ratio range.

The claims were examined with regards to the elected specie of formula (I), clothianidin, and the elected specie of formula (Il), 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl}-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide. Claims 1, and 6-20 are pending; claims 6-7, and 16-17 are withdrawn as being directed to non-elected inventions, and claims 11, and 18-19 have been withdrawn from consideration, as they do not read on both of the previously elected species of formula

(II-1) and formula (Im), 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl}-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide and clothianidin.

3. Claims 1, 8-10, 12-15, and 20 were examined.

4. Claims 1, 8-10, and 12-15 are rejected.

5. Claim 20 is free of the prior art.

**Claim Rejections-35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1, 8-10, and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lahm et. al., WO 2003/015518 publication, in view of Angst et. al., WO 2002/37964 publication. The reference of Lahm et. al. was discussed in the previous office action dated 4/27/2009, and was presented on the Information Disclosure Statement (all of previous record).

Claims 1, 8-10, and 12-15 are drawn to a composition comprised of a synergistically effective amount of the elected compound of formula (I), clothianidin (Im), and the elected compound of formula (II), 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, in which the ratio of clothianidin and 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide ranges from 250:1 to 1:50.

Lahm et. al. teaches a method of controlling pests by application of a compound of formula I, including the compound, 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide (Abstract; p. 2, lines 5-26; p. 3, lines 1-19; p. 42, Example 11), in a mixture with acceptable carriers or diluents (p. 89, lines 1-4). Lahm et. al. also teaches that

compounds of formula I, such as 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, can be combined with at least one additional biologically active compound, to provide broader spectrum pesticide activity (p. 10, lines 24-27; p. 96, lines 23-28). Particularly, it is taught that preferred compounds for preparing mixtures with compounds of formula (II) include neonicotinoid compounds such as clothianidin (p. 97, line 37-p. 98, line 2; p. 141, claim 6 and 9). Lahm et. al. teaches that compounds such as 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide exhibit activity towards a broad variety of pests (p. 91, line 32-p. 96, line 22).

While Lahm et. al. teaches that 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is mixed preferably with clothianidin for broader spectrum pesticide activity, it is not explicitly taught that the combination is synergistic, or that the ratio range for clothianidin to 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide ranges from 250:1 to 1:50.

Angst et. al. teaches a composition for controlling pests which comprises a compound of formula (A) and additional compounds, including clothianidin (Abstract; p. 1, 3rd paragraph; p. 2, right column, 5th compound from bottom; p. 23, claim 1). It is taught that the composition comprised of compounds of formula (A) and clothianidin results in a synergistic pesticide (p. 7, 2nd and 3rd paragraphs), and that the mixing ratio for compounds of formula (A) to clothianidin ranges from 100:1 to 1:6000 (p. 7, 1st

paragraph). Angst et. al. teaches that the synergistic combination is effective in protecting a broad variety of crops (p. 11, 2nd full paragraph), and that the combination of compound of formula (A) with clothianidin is less phytotoxic than either agent alone (p. 7, last paragraph).

One of ordinary skill in the art would have been motivated, at the time of the invention, to prepare a synergistic pesticide composition comprised of clothianidin and 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, in a ratio range between 250:1 to 1:50, because Lahm et. al. teaches that 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is preferably combined with neonicotinoids such as clothianidin for increased pesticide action, and Angst et. al. teaches that compositions comprised of clothianidin and other pesticide agents results in a synergistic combination. As the compounds of formula (A) taught by Angst and 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide are both pesticides, and are taught to be effective for protecting a variety of crops, it would have been prima facie obvious for one of ordinary skill in the art to substitute 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide for compounds of formula (A) in the composition taught by Angst. Particularly, Lahm et. al. teaches that preferred combinations include compounds of formula (II) such as 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide and clothianidin. Therefore, as it is taught that 3-bromo-N-

[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide is preferably combined with clothianidin, and Angst et. al. teaches that compositions comprised of clothianidin and other neonicotinoid compounds provide synergistic pesticide action, one of ordinary skill in the art would have expected that combining 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide with clothianidin would also have provided a synergistic pesticide effect. Angst et. al. teaches that the ratio ranges of clothianidin to compounds of formula (A) are between 6000:1 to 1:100. As it would have been obvious to substitute 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide for compounds of formula (A) in this composition, it would have been obvious to prepare a mixture of clothianidin and 3-bromo-N-[4-chloro-2-methyl-6-{(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide between a ratio range from 6000:1 to 1:100, which includes the claimed range.

**Information Disclosure Statements**

10. The information disclosure statements (IDS) submitted on 5/13/2010 and 6/17/2010 were filed after the mailing date of the non-final action on 1/13/2010. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements have been considered by the examiner.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH PIHONAK whose telephone number is (571)270-7710. The examiner can normally be reached on Monday-Thursday 8:00 AM - 6:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571)272-0629. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.P.

/SREENI PADMANABHAN/
Supervisory Patent Examiner, Art Unit 1627